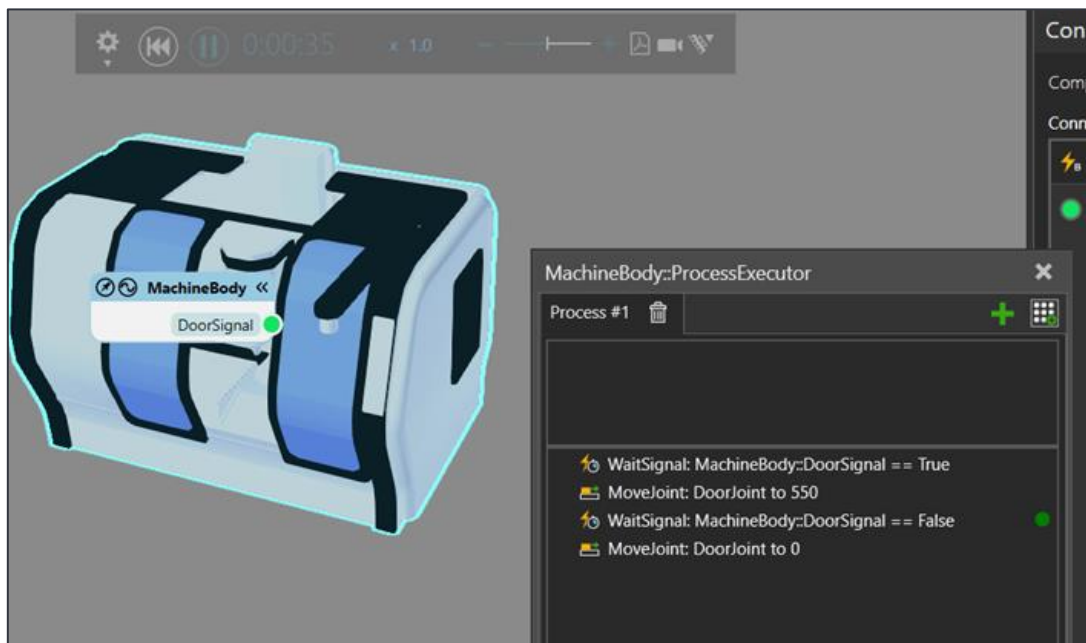


WaitSignal Statement

Visual Components 4.2 | Version: April 29, 2020



In this tutorial, you will learn how to:

- Use the **WaitSignal** Statement in **Process Executor**.

Support

support@visualcomponents.com

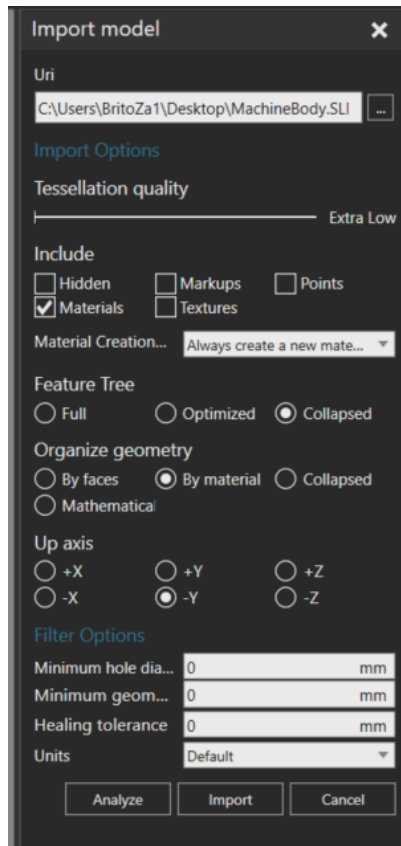
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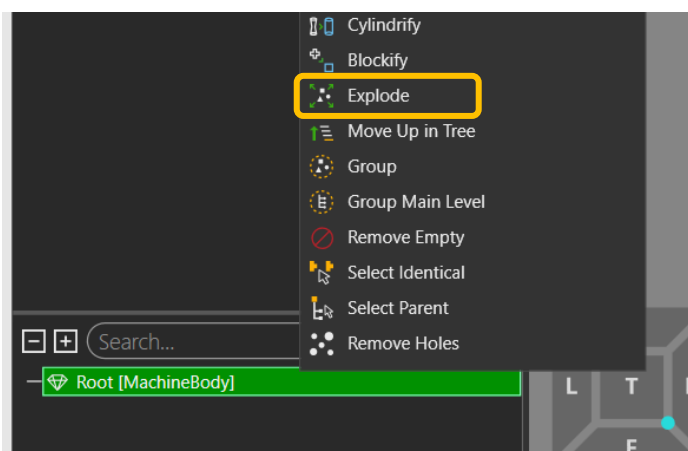
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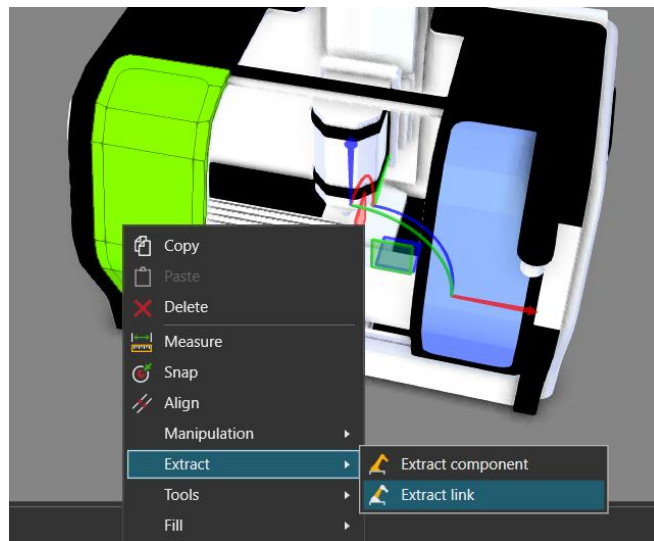
1. PREPARE THE COMPONENT



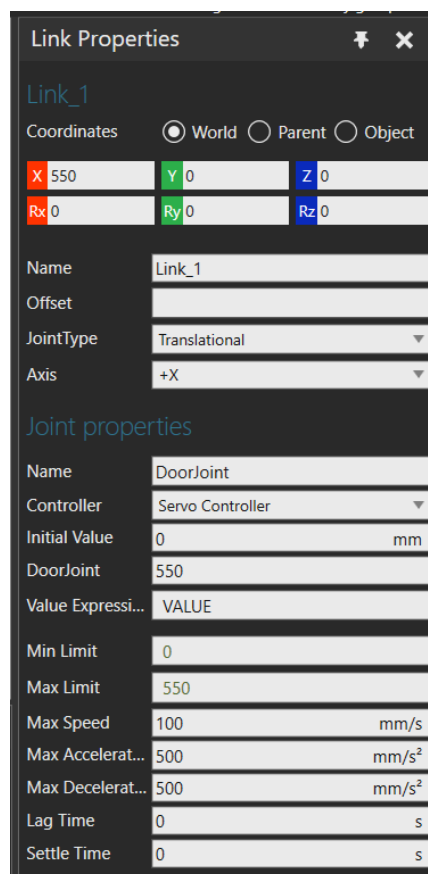
1. Go to the **Modeling** context.
2. Import the CAD from the tutorial files.
3. Explode the geometry.



4. Select the parts shown on the image below and Extract a link (Link_1).

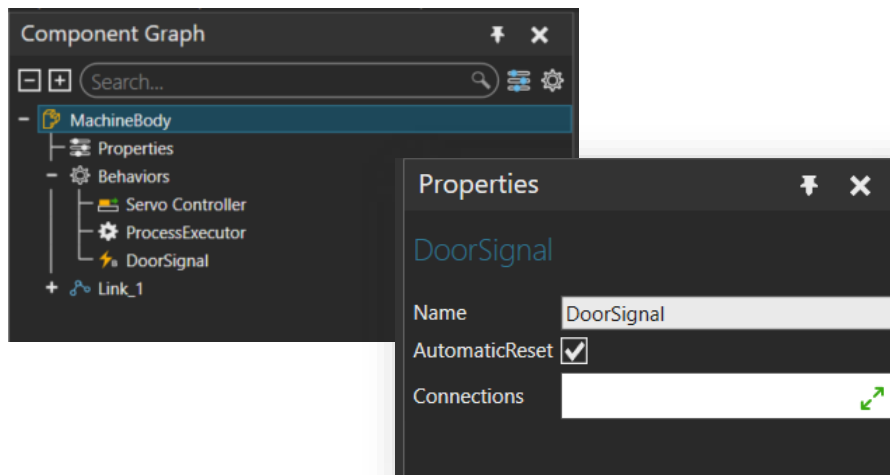


5. Set the **Joint** type as **Translational** in the **X** axis
6. On the Joint Properties set the **Name** as DoorJoint and create a new Servo Controller.
7. Leave the Minimum Limit as 0 and set the Maximum Limit as 550 (this value has already been measured).



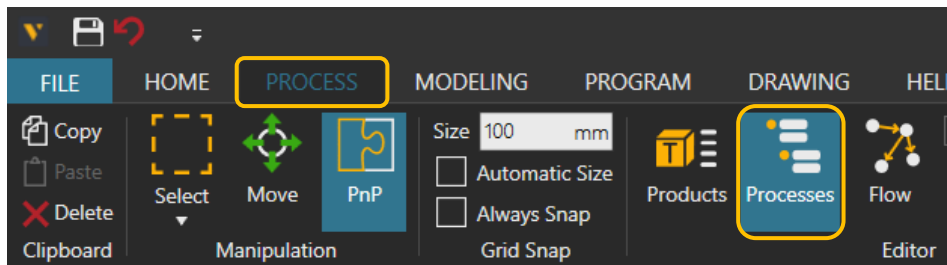
8. Add an **Executor** behavior.

9. Add a **BooleanSignal** and name it as DoorSignal.



2. DEFINE THE PROCESS

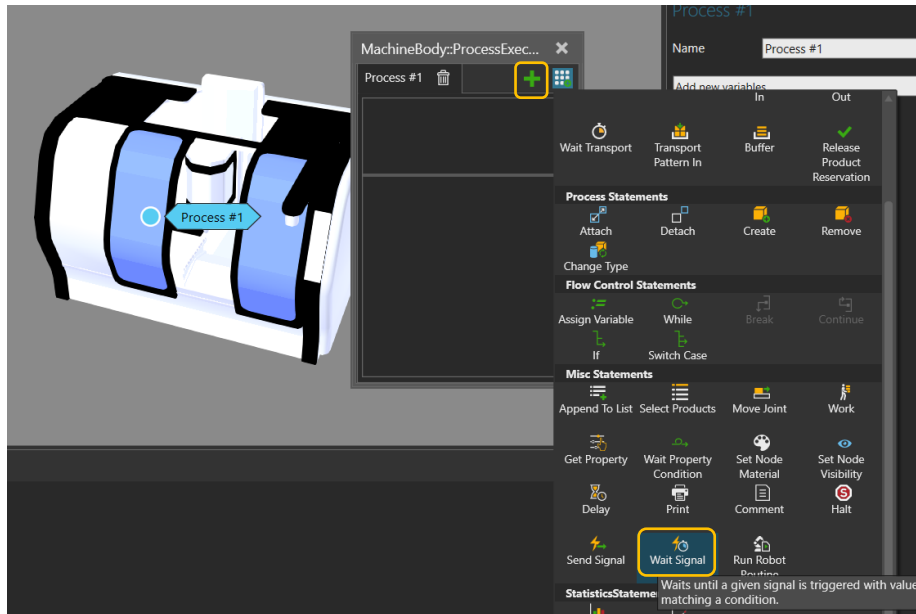
1. Go to the Process tab and select Processes.



2. Select the Process from the MachineBody (there is no label because there is no process yet).

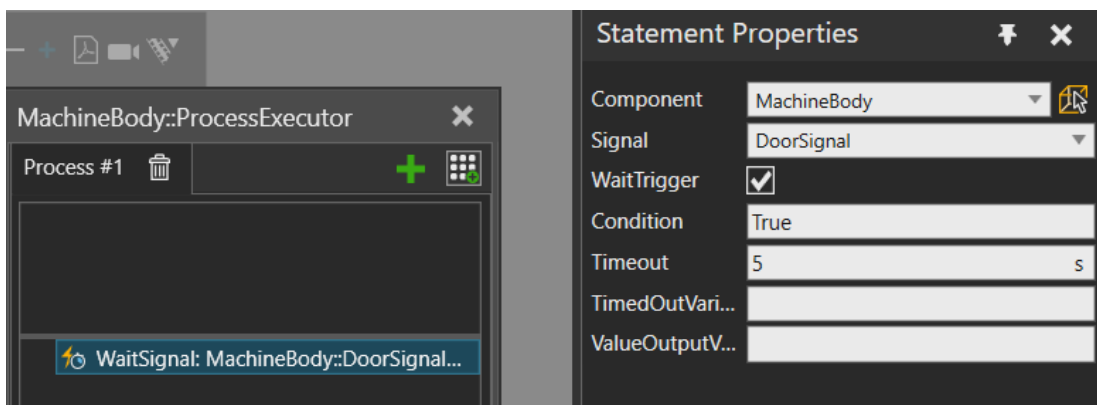


- Click on the “+” to add a Process and then add a WaitSignal statement to that newly created process.

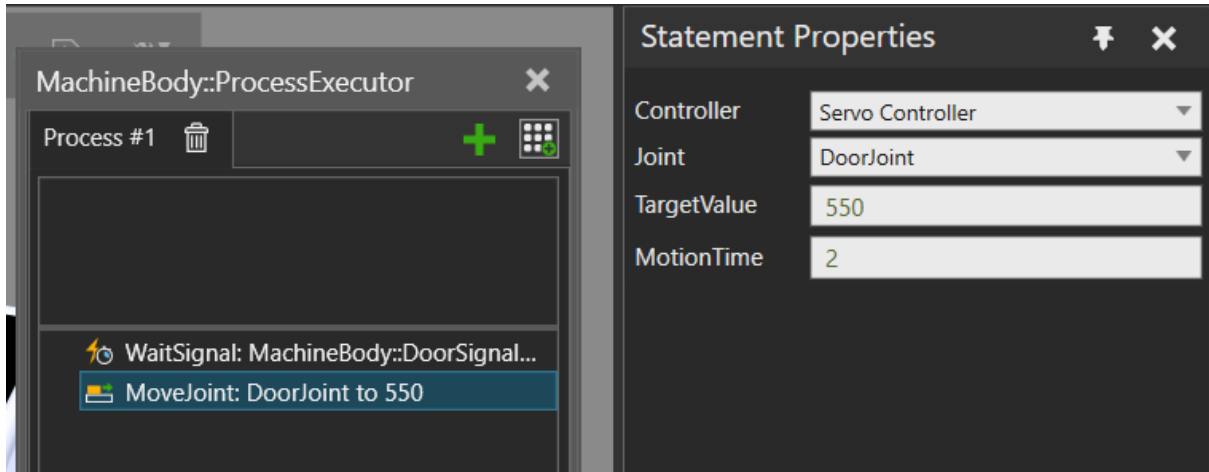


- Select the MachineBody as the **Component** and the **Signal** as the DoorSignal.
- Leave the **WaitTrigger** option enabled. It allows statement execution to pass only after the signal value is updated.
- Set *True* as the **Condition**.
- Set the **Timeout** as 5 seconds, so the process will wait for five seconds to get the correct value before continuing the execution.

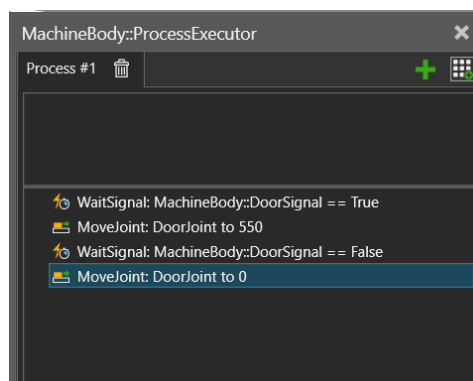
Hint: If the Timeout is set as 0s, it will wait as long as the correct Condition is met.



8. For controlling the door joint let's add a **MoveJoint** statement.
9. Select the **Servo Controller** as the **Controller** and the **DoorJoint** as the **Joint**.
10. Set the **TargetValue** as 550m (the distance the door should move) and the **MotionTime** as 2 seconds.

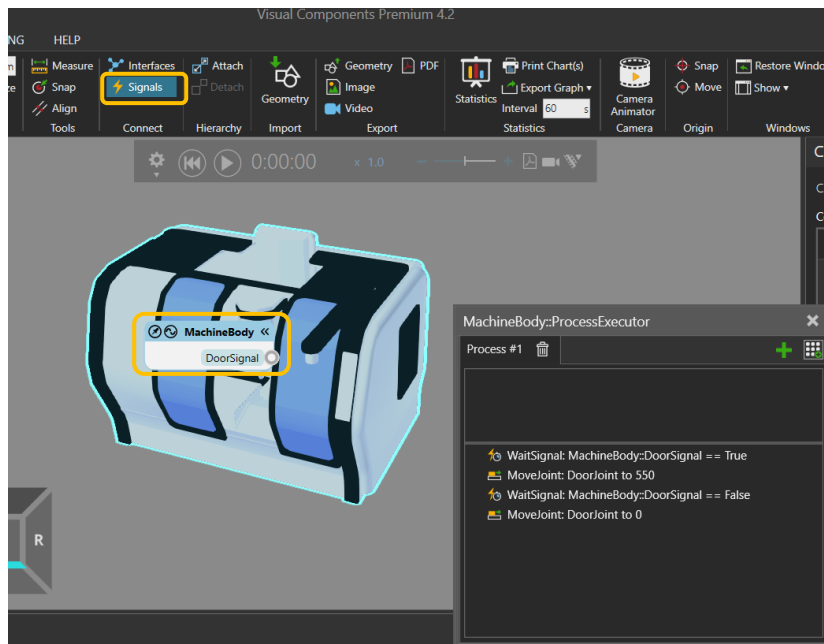


11. Copy both statements and paste them.
12. In the second **WaitSignal** statement change the **Condition** to *False*.
13. Change the second **MoveJoint TargetValue** to 0.



3. TEST THE SIGNALS

1. Go to the **Home** context.
2. Enable the **Signals**.



3. Run the Simulation and check that the door opens and closes as the signal value balloon (the green dot in the image) in the 3D label is clicked.

